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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

03/29/2004

Gary L. Loser Varian Semiconductor Equipment Associates, Inc. 35 Dory Street Gloucester, MA 01930 EXAMINER

BERMAN, JACK I

ART UNIT PAPER NUMBER

2881 DATE MAILED: 03/29/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,901	04/04/2001	Joseph C. Olson	V0077/7155	3673

TITLE OF INVENTION: CONTROL SYSTEM FOR INDIRECTLY HEATED CATHODE ION SOURCE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	06/29/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status.
   See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (703) 746-4000

appropriate. All further cor indicated unless corrected t maintenance fee notification	respondence including the local pelow or directed otherwise as.	Patent, advance order in Block 1, by (a) s	rs and notification pecifying a new co	ATION FEE (if requ of maintenance fees v orrespondence address	ired). Blocks 1 through 4 s vill be mailed to the current and/or (b) indicating a sep	should be completed where correspondence address as arate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)  7590 03/29/2004			e Block i)	Fee(s) Transmittal. The papers. Each additions	mailing can only be used f is certificate cannot be used al paper, such as an assignm e of mailing or transmission.	for any other accompanying
Gary L. Loser Varian Semiconduc 35 Dory Street Gloucester, MA 01	ctor Equipment Associ	ates, Inc.		I hereby certify that the States Postal Service vaddressed to the Mai	rtificate of Mailing or Trans his Fee(s) Transmittal is bein with sufficient postage for fir I Stop ISSUE FEE address TO, on the date indicated be	g deposited with the United st class mail in an envelope above, or being facsimile
						(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE	FIF	RST NAMED INVEN	TOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,901	04/04/2001		Joseph C. Olson		V0077/7155	3673
TITLE OF INVENTION: CO	ONTROL SYSTEM FOR IN	NDIRECTLY HEATE	ED CATHODE IO	N SOURCE		
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nonprovisional	NO	\$1330		\$300	\$1630	06/29/2004
EXAM	INER	ART UNIT	CI	ASS-SUBCLASS	]	
BERMAN	I, JACK I	2881		250-424000	-	
Address form PTO/SB/12  "Fee Address" indicating PTO/SB/47; Rev 03-02 of Number is required.  3. ASSIGNEE NAME AND PLEASE NOTE: Unless been previously submitted (A) NAME OF ASSIGNI	on (or "Fee Address" Indicator more recent) attached. Use RESIDENCE DATA TO B an assignee is identified beld to the USPTO or is being SEE	correspondence tion form e of a Customer  E PRINTED ON THI low, no assignee data submitted under separ (B) R	agents OR, altern firm (having as a agent) and the na attorneys or agent will be printed.  E PATENT (print of will appear on the ate cover. Complet RESIDENCE: (CIT ed on the patent);	patent. Inclusion of a ion of this form is NO Y and STATE OR CO	of a single attorney or 2 2 2 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ignment.
4a. The following fee(s) are	enclosed:	_	ayment of Fee(s):			
☐ Issue Fee☐ Publication Fee☐				ount of the fee(s) is end card. Form PTO-2038		
□ Advance Order - # of Copies □ The Direct			ereby authorized by cl	narge the required fee(s), or (enclose an extra c	credit any overpayment, to	
Director for Patents is reques	sted to apply the Issue Fee ar	nd Publication Fee (if	any) or to re-apply	any previously paid is	ssue fee to the application ide	entified above.
(Authorized Signature)		(Date)				
other than the applicant; a interest as shown by the recommendation of information obtain or retain a benefit it application. Confidentiality estimated to take 12 minut completed application for case. Any comments on suggestions for reducing the Patent and Trademark C 22313-1450. DO NOT S SEND TO: Commissioner	I Publication Fee (if require a registered attorney or age cords of the United States Pattorn is required by 37 CFR by the public which is to five is governed by 35 U.S.C. I es to complete, including generated by the amount of time your the amount of time your fiftee, U.S. Department of END FEES OR COMPLE for Patents, Alexandria, Virgulation Act of 1995, no poless it displays a valid OME.	ent; or the assignee tent and Trademark C 1.311. The informat le (and by the USPT 22 and 37 CFR 1.14. athering, preparing, al 1 vary depending up equire to complete to the Chief Informat of Commerce, Alex TED FORMS TO T ginia 22313-1450.	or other parfy in Dffice.  ion is required to O to process) an This collection is not submitting the on the individual this form and/ortion Officer, U.S. (andria, Virginia HIS ADDRESS.			



### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

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Varian Semiconductor Equipment Associates, Inc. 35 Dory Street			ART UNIT	PAPER NUMBER
Gloucester, MA 01930			2881	
•			DATE MAILED: 03/29/2004	4

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 288 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 288 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)	
	09/825,901	OLSON ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Jack I. Berman	2881	
The MAILING DATE of this communication ap All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOL-8 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT of the Office or upon petition by the applicant. See 37 CFR 1.3	S (OR REMAINS) CLOSED i 5) or other appropriate comm RIGHTS. This application is	n this application. If not included unication will be mailed in due course. THIS	
1. $\boxtimes$ This communication is responsive to <u>the amendment file</u>	<u>d on 12/22/03</u> .		
2. The allowed claim(s) is/are <u>1 and 5-13</u> .			
3. $\boxtimes$ The drawings filed on <u>22 June 2001</u> are accepted by the	Examiner.		
4. Acknowledgment is made of a claim for foreign priority a) All b) Some* c) None of the:  1. Certified copies of the priority documents hat 2. Certified copies of the priority documents hat 3. Copies of the certified copies of the priority of International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE noted below. Failure to timely comply will result in ABANDON THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. A SUBSTITUTE OATH OR DECLARATION must be sub INFORMAL PATENT APPLICATION (PTO-152) which get including changes required by the Notice of Draftsperior (a) including changes required by the Notice of Draftsperior (b) including changes required by the attached Examined Paper No./Mail Date  [b] Including changes required by the attached Examined Paper No./Mail Date  [c] Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in the defendance of the priority documents and the	eve been received.  Eve been received in Application documents have been received.  Eve of this communication to file and the application.  Event of this application.  Event of this application.  Event of the attached EX ives reason(s) why the oath of the submitted.  Ever of this application.  Event of the attached EX ives reason(s) why the oath of the submitted.  Event of Section 1.84(c) should be written on the the header according to 37 Cloosit of BIOLOGICAL MAT	on No  d in this national stage application from the e a reply complying with the requirements  AMINER'S AMENDMENT or NOTICE OF redeclaration is deficient.  W ( PTO-948) attached  r in the Office action of the drawings in the front (not the back) of FR 1.121(d).  ERIAL must be submitted. Note the	
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SE Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposi of Biological Material	6. Interview S Paper No. 3/08), 7. Examiner's	Informal Patent Application (PTO-152)  ummary (PTO-413),  /Mail Date Amendment/Comment  Statement of Reasons for Allowance  Jack J. Derman  Primary Examiner	

U.S. Patent and Trademark Office PTOL-37 (Rev. 1-04) The following is an examiner's statement of reasons for allowance: The prior art does not teach to control a bias current, a filament current, or the beam current extracted from an arc chamber comprising an indirectly heated cathode in response to an extraction current supplied by an extraction power supply.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack I. Berman whose telephone number is (571) 272-2468. The examiner can normally be reached on M-F (8:30-6:00) with every second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jack d. Berman
Jack I. Berman
Primary Examiner
Art Unit 2881